



REMARKS

The Advisory Action of May 20, 2004 addresses claims 1-6,8-25, 27-40, 42-86, 89 and 90. These claims remain pending.

Claim 13 is amended to remove an improper period. Claims 77, 83 and 84 were amended to clarify that "non-specifically bound" includes that single-stranded polynucleotide sites are formed. This merely imports the definition of that term from page 19, in paragraph 58, and as illustrated in Figure 2 (  ), and so is not a narrowing amendment. Minor editorial amendments are made to claims 42, 49 and 55. Claim 78 is amended to more correctly recite "Markush" language.

Rejection over Carninci 1996

Claims 77-86 remain rejected under 35 U.S.C. § 102(b) as lacking novelty over Carninci 1996. This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested.

The Applicant reiterates that the present application utilizes the term "non-specifically hybridized" nucleic acids are those that form duplexes that include single-stranded regions within the hybridized segments. In Figure 2, these non-specifically hybridized drivers are illustrated as containing portions .

The Examiner asserts that Applicant is making arguments based upon illustrations in a figure, not terms within the claims. This is not quite right. What Applicant has argued is how the

specification supports an interpretation of a term within the claims. Applicant's argument is that the Examiner is interpreting the term "non-specifically hybridized" too broadly, to improperly include overhanging single stranded ends. Such interpretation, at least as applied to polynucleotide drivers, is not correct.

Applicant again submits that Carninci 1996 teaches the steps of Figure 1 of the present application, but that the present claims recite at least one step from Figure 2, i.e. removal of non-specifically hybridized driver polynucleotides, that is not disclosed by Carninci 1996. This step is explicit in the claims, e.g. at step III in claim 1. Accordingly, the invention as presently claimed is novel over Carninci 1996 and instant rejection should be withdrawn.

#### Rejection over Chang and Carninci 1996

Claims 1-6, 8-25, 27-40, 42-73, 77-86, 89 and 90 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Chang '874 in view of Carninci 1996. This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested.

Applicant again submits that the Examiner fails to establish *prima facie* obviousness of the invention as claimed. In particular, neither of the cited references disclose or suggest that non-specifically hybridized polynucleotide drivers should be removed from the reaction before recovering full-length or full

coding-length cDNA and proceeding with additional steps. Therefore the combination of the references omits mention of this step and furthermore there is no suggestion in the prior art to modify the teachings of Chang or Carninci to include such a step.

As the Examiner fails to properly establish *prima facie* obviousness of the invention as claimed, the instant rejection should be withdrawn.

Further as to claim 89, reciting normalization and subtraction for  $R_0T$  values of 5 to 10, the Examiner's position is not understood. Applicant fails to grasp why the "value is based upon the nucleic acid population being measured, not upon the method of analysis" is relevant. The Examiner appears to be taking a position that this limitation is inherent in what has been described by Chang and/or Carninci 1996, but has not pointed to the disclosure of either reference that leads to this conclusion.

The Examiner is reminded that an inherent result is one that necessarily occurs as a result of conditions described in a reference. Applicant submits that mere recitation that subtraction or normalization is performed speaks not one word about the  $R_0T$  values to which those hybridization steps are extended. Accordingly, claim 89 may be found patentable over Chang and Carninci 1996 as reciting this additional unobvious feature.

The Examiner also has not addressed the recitation in claim 90 that the chemical tagging procedure is performed on ice. Applicant

has demonstrated an unexpected increase in efficiency in producing full-length or full coding-length cDNA when tagging of the 5' diol structure of the mRNA is performed on ice. Applicant submits that this result establishes unobviousness of at least claim 90 over Chang and Carninci 1996.

Rejection of claims 74-76 over Chang and Carninci and others

Claims 74-76 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Chang in view of Carninci and Bouma (claim 74), Mishra (claim 75) or Lavery (claim 76). The tertiary references are cited for disclosure of specific methods for removing certain classes of polynucleotides from a reaction mixture. None of these tertiary references remedy the basic deficiency of Chang and Carninci to disclose or suggest removal of non-specifically hybridized polynucleotide drivers from a reaction, followed by recovery of full-length or full-coding length cDNA. Thus, each of these rejections fails for the same reason that the rejection based only upon Chang and Carninci 1996 fails. Accordingly, the additional rejections of claims 74-76 should be withdrawn.

Applicant submits that the present application well-describes and claims patentable subject matter. The favorable actions of withdrawal of the standing rejections and allowance of the claims are respectfully requested.

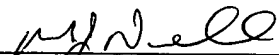
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mark J. Nuell (Reg. No. 36,623) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to the provisions of 37 C.F.R. §§ 1.17 and 1.136(a), Applicant respectfully petitions for a three (3) month extension of time for filing a response in connection with the present application. An extension of two (2) month(s) was previously requested and paid for on May 10, 2004 in the instant application. Thus, a fee of \$530.00 is required to obtain an additional one (1) month(s) extension. The required fee of \$420.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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